

STAR LAKE CANAL SUPERFUND SITE

- Port Neches, Jefferson County, Texas

EPA Region 6

EPA ID# TX0001414341

Site ID: 0605043

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State Congressional District: 9



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The United States Environmental Protection Agency (EPA) has completed enforcement actions to compel the Potentially Responsible Parties (PRPs) to perform and finance the Remedial Investigation and Feasibility Study (RI/FS) for the Site. The purpose of the RI/FS is to determine the nature and extent of contamination and to gather sufficient information about the Site to support an informed risk management decision regarding which remedy is the most appropriate for the Site. The EPA has entered into an Administrative Order on Consent (AOC) with Huntsman Petrochemical Corporation and Chevron Environmental Management Corporation (the PRPs) to perform the RI/FS. The AOC was signed on December 22, 2005. The Tier I RI report has been approved by the EPA. Another sediment sampling event was originally planned for October, 2008; however, EPA postponed the event due to hurricane Gustav, in order to obtain the most reliable data possible. The Tier 2 RI Work plan was approved on March 9, 2009.

Current Status

The Tier 2 RI sediment, surface water and tissue sample collection activities were completed by October 2009. A draft Tier 2 RI work plan addendum was approved by November, 2009.

NOAA & TCEQ comments on RI addendum workplan was sent Nov 30, 2009. Conference call in Jan 2010 resolved issues between the Eco Risk Assessors and Chevron to proceed with the workplan to submit the Tier 2 RI report in September 2010 the Spoil Pile sampling and analysis. The field sampling for the Jefferson Canal spoil pile investigation took place between April 21 and 27, 2010. In June Tier 2 RI data validation for HHRA and BERA was completed. EPA and other stakeholders have reviewed the Tier 2 RI report submitted on September 10, 2010 with additional data and analyses. EPA, TCEQ and stakeholders(e.g. NOAA) provided comments to the Sept 10, draft Tier 2 RI report in early December 2010.

- On Feb 15, 2011 Chevron et al presented answers to questions about the Tier 2 RI Report. A draft time line by Chevron showing final Feasibility Rreport in March , 2013. This report presents results of Human Health Risk Assessment and initial steps of Base Ecological Risk Assessment (BERA). HHRA was determined to be within acceptable risk level (1.E-05)..
- On June 17, Chevron et al presented the Alignment document with a FS workplan completing in December 2012. EPA is attempting to expedite the FS report schedule by shortening response time to resolve issues and more informal meetings/conferences.
- Chevron completed the Tier 2 RI Report in August 2011. Chevron et al provided the corrected pages and tables of the RI Report in July 2011 and updated tables in August 2011.

Currently running sensitivity analysis to zero in on a few remedial options that will address the Ecorisk at Star Lake. In October 2011 Chevron agreed to run remedial options concurrently with ecorisk determination.. Targeted sensitivity analysis was presented on November 9, 2011.

- Chevron ran the Sensitivity Analysis for 12 different cases of Remediation Scenarios
- EPA had a meeting with TCEQ & other stakeholders in early December 2011. The meeting resulted in EPA to direct Chevron et al to run different Remedial Alternatives using Scenario 10 b

. 10 b is to remediate all polygons higher than 3 or 4 for sediment samples. The Remedial Scenarios will follow CERCLA 9 point criteria.

- EPA requested Chevron- Huntsman group to formulate Remedial Alternatives based on Sensitivity scenario 10b within 30 working days. EPA expects the the preliminary remedial alternatives by the end of second week of January, 2012.
- EPA received Preliminary Evaluation of Alternatives on Jan 4, 2012. The remedies provided were general in nature. The study provided couple of tables showing primary and secondary risks at sample points.
- In February 2012 EPA requested Chevron-Huntsman to provide remedies for all polygons with ERM/PEL – Q category greater than 2. Chevron has been requested to provide the FS by March 1, 2012 with a meeting with Chevron-Huntsman at R6 Dallas office around March 15, 2012. The FS should be completed by April 16, 2012 ,with corrections/modification from EPA and stakeholders from the March 15, meeting
- Chevron_Huntsman accepted the schedule prepared with backing from Enforcement. The Preliminary evaluation of Alternatives was received on March 1, 2012. After a meeting on the 19th of March , 2012 Chevron will provide Draft Feasibility study on April 16, 2012. The March 19th meeting dicussed the Remedial Options for the different Areas of Interest (AOI). Almost all the AOIs had some active remedy e.g. dredging, cover etc recommended. The meeting connected to TCEQ , Trustees discussed schedule, alternatives and preliminary data for the FS report.
- There was discussions on difficulty of dredging in Molasses Bayou which is where major wetland conditions will be faced. Operating marsh buggy in Molasses River near sample location MB-61 will be difficult. Also removal has to be weighed against an existing marsh which may be affected by remedial action.
- The Draft FS document was received on April 16 th, 2012 on schedule. The FS document was more comprehensive than other documents presented in the past. EPA,TCEQ and the natural resource trustees reviewed the Draft FS Report and will send comments to Chevron by May 4, 2012, to improve and clarify the report. EPA and stake holders plan to have a teleconference with Chevron_ Huntsman in mid May to clear any questions that require resolution before the Final FS Report (in reality the complete RI/FS report) due on or before June 4, 2012.
- EPA, TCEQ and Trustee comments were sent to Chevron_Huntsman on May 4, 2012 to improve and clarify the Final FS Report. Any further clarification of the FS report will be discussed in a Teleconference in mid May, 2012.
- On May 15 at a teleconference between EPA, TCEQ and natural resource trustees and Chevron_Huntsman, Chevron tried to addressany issues that were not clear to EPA and stakeholders. One of the big issues was how alternatives will be picked for buried pipelines in the area. Chevron_Huntsman went back and looked at the pipeline data from Texas Railroad Commission (TRC). Many other pipelines have been identified in the area from the TRC data. As of the last week of May, Chevron_Huntsman is developing updated versions of remedial alternatives. Chevron wants to make the known pipelines transparent in the FS report. TRC pipeline data may not be complete and updated remedial alternatives will be determined during Remedial Design phase.
- The Final FS Report was delivered on June 5, 2012
- The Proposed Plan was drafted in mid July, 2012. The Proposed Plan was sent to HQ, TCEQ and stake holders for comments. Comments received back in ealy August, 2012.
- Easily understood Fact Sheets about the Planned Remedy will be mailed as early as possible.
- In August the Draft Proposed Plan is undergoing several layers of scrutiny internally within EPA. Possible start of Proposed plan is in late September 2012.

- **Preparing to open 30 day public comment period. The Public Comments will have to wait comments from CSTAG. EPA anticipates CSTAG comments by early November 2012.**
- In the first week of November CSTAG had no comments. But HQ had questions about cleanup levels in the ROD and lack of site specific data.

Benefits

The investigation and cleanup of the Site will ensure the protection of human health and the environment. Specific cleanup benefits will be identified during the Remedial Investigation and Feasibility Study currently taking place for the Site.

National Priorities Listing (NPL) History

Proposal Date: July 22, 1999

Final Listing Date: July 27, 2000

Site Description

Location: The Star Lake Canal Superfund Site (hereinafter "the Site") is located in Port Neches, Texas, an industrial city adjacent to the Neches River in East Texas in the center of the Beaumont-Orange-Port Arthur Golden Triangle (see the "Site Aerial Photograph" section of this summary). The Star Lake Canal confluent with the Jefferson Canal in an area between State Highway 366 and Sara Jane Road (a.k.a. East Port Neches Avenue, Port Neches Atlantic Highway, and Atlantic Road) at the geographic coordinates of approximately 29°58'30" north latitude and 93°55'12" west longitude (taken from the Port Arthur North, Texas Quadrangle, 7.5 Minute Series Map [1993]).

Population: The population of the City of Port Neches is approximately 14,452. Other communities in the area include Groves, Nederland, and Port Arthur.

Setting: The Site is currently defined as the lengths of two industrial canals, the Star Lake Canal and the Jefferson Canal, from their origins to the confluence of the Star Lake Canal with the Neches River. The Star Lake Canal is also known as the Defense Plant Corporation Canal, the Neches Butane Outfall Canal, the Neches Butane Products Company Outfall Canal, and the Texaco Chemical Outfall Canal. The Jefferson Canal is also known as the Texaco Chemical Company Outfall Canal, the Jefferson County Canal, the Star Lake Outfall Canal, and the Texaco Chemical Company Stormwater Canal.

The Jefferson Canal was constructed in the late 1940's as an industrial wastewater and stormwater outfall. The Star Lake Canal was constructed after 1948 for the same purpose. Both canals are currently being utilized for industrial and stormwater purposes by local chemical and other manufacturing facilities.

The Site consists of surface water sediments in the Star Lake Canal, Jefferson Canal, and Molasses Bayou. These wetlands are habitats known to be used by State-designated threatened species. From the confluence of the Molasses Bayou, Star Lake Canal, and Neches River, surface water flows down the Neches River approximately 3 ½ miles to Sabine Lake. Sabine Lake is used as a fishery and produced more than 1 million pounds of fish and shellfish in 1996. The land use surrounding the Site is industrial, residential, and recreational.

Photos: [Site](#)

Site Map



Wastes And Volumes

- The Jefferson and Star Lake Canals have received industrial wastewater and stormwater discharges from local chemical and other manufacturing facilities for a number of years. This Site was added to the National Priorities List based on evidence that hazardous substances, including chromium, copper, polynuclear aromatic hydrocarbons, and polychlorinated biphenyls have migrated or could potentially migrate to Molasses Bayou, Star Lake Canal, Neches River, Sabine Lake, and their associated wetlands. Pentachlorophenol and toxaphene have been found in the sediments of the Jefferson Canal.
- The volumes of wastes currently present at the Site have not been determined. This information will be obtained during the Remedial Investigation and Feasibility Study currently being planned for the Site.

Health Considerations

- Human Health and Ecological Risk Assessments are an integral part of the Remedial Investigation and Feasibility Study (RI/FS) currently being planned for the Site.
- A Human Health Risk Assessment estimates the current and possible future risks if no action were taken to clean up a site. The EPA's Superfund risk assessors determine how threatening a hazardous waste site is to human health and the environment. They seek to determine a safe level for each potentially dangerous contaminant present (e.g., a level at which ill health effects are unlikely and the probability of cancer is very small). Living near a Superfund site doesn't automatically place a person at risk, that depends on the chemicals present and the ways people are exposed to them.

- An Ecological Risk Assessment is defined as a process that evaluates the likelihood that adverse ecological effects are occurring or may occur as a result of exposure to one or more stressors. A stressor is any physical, chemical, or biological entity that can induce an adverse ecological response. Adverse responses can range from sublethal chronic effects in individual organisms to a loss of ecosystem function. Only chemical or physical stressors are subject to risk management decisions at Superfund sites.
- Human Health and Ecological Risk Assessments is being performed during the RI/FS currently being performed for the Site.

Record Of Decision ---

- The final remedy (cleanup alternative) for a site is published in a Record of Decision (ROD). The ROD is the official documentation of how the EPA considered the remedial alternatives and why the EPA selected the final remedy. Before a ROD can be finalized, the EPA must provide a Proposed Plan for public review and comment. This plan summarizes the remedial alternatives presented in the analysis of the Remedial Investigation and Feasibility Study (RI/FS) and identifies the preferred alternative, the rationale for that preferred alternative, and documents that support the EPA's decision.
- A ROD has not been signed for the Site. A Proposed Plan will be presented to the public during the latter part of the RI/FS currently being planned for the Site. The RI/FS is expected to be completed approximately 1½ years from the start date.

Community Involvement ---

- "Community involvement" is the name the EPA uses to identify its process for engaging in dialogue and collaboration with communities affected by Superfund sites. The mission of the Superfund Community Involvement Program is to advocate and strengthen early and meaningful community participation during the EPA's remedial activities at a Site. The EPA's community involvement program is founded on the belief that people have a right to know what the EPA is doing in their community and to have a say in it. Its purpose is to give people the opportunity to become involved in the EPA's activities and to help shape the decisions that are made at a site.
- Community Involvement Plan: The Community Involvement Plan (CIP) specifies the community involvement activities that the EPA expects to undertake during the remedial activities planned for the Site. A CIP, based on community interviews and other relevant information about the Site, will be prepared during the early phases of the Remedial Investigation and Feasibility Study (RI/FS) currently being performed for the Site.
- Public Meetings: Public meetings will be scheduled during the early phases of the RI/FS currently being performed for the Site.
- Fact Sheets: Fact sheets will be prepared as necessary during the planning and implementation of the RI/FS. These fact sheets will be filed at the Site's repository and distributed to people on the mailing list. Anyone who desires to be placed on the mailing list to receive current information about the Site is encouraged to call 1-800-533-3508. This Site Status Summary can be found on the internet at the following address:

<http://www.epa.gov/earth1r6/6sf/6sf-tx.htm>

- Site Repository: The purpose of the Site's Repository is to provide the public a location near their community to review and copy background and current information about the Site. The Site's repository is located at:

Effie & Wilton Hebert Public Library
2025 Merriman
Port Neches, TX 77651
(409) 722-4554
<http://www.ptn.lib.tx.us>

Site Contacts

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